INTERFACE DESIGN STANDARD	
IDS-56A	
SHEET 1 OF 1	DATE: 09/16/97
DRAWN: JEM	APPROVED: HN

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REV.	DESCRIPTION	DATE	APPR.
F	PER ECN 12819	03/28/18	JEM
G	PER ECN 13033	07/24/18	JEM
H	PER ECN 13264	03/15/19	JEM
I	PER ECN 13787	06/17/20	JEM
J	PER ECN 14215	11/26/24	DW

Description: 56 Series, PkZ ®, Size 12

MATERIALS

BODIES

Plug: Brass Per ASTM B16

Receptacle: Brass Per ASTM B16

CONTACTS

Male Contact: Beryllium Copper Per ASTM B196 Or Brass Per ASTM B16

Female Contact: Beryllium Copper Per ASTM B196

INSULATORS

Virgin Teflon (PTFE) Per ASTM D1710 Or
#1 Varyflex Type HV, Two-Part Epoxy

PLATING

Gold Per MIL-DTL-45204 (Electro Deposited)

Copper Per SAE AMS 2418 (Electro Deposited)

Nickel Per QQ-N-290

White Bronze (Tri-Metal): Copper, Tin & Zinc

CLIP RING

Beryllium Copper Per ASTM B196

FINISH (Ending Letter of Part Number)

A: .000050" Min. Gold Over Nickel

B: .000030" Min. Gold Over Nickel

E: .000030" Min. Gold Over Nickel (Contacts)
.000040" Min. White Bronze Over Copper (Bodies)

Other Metal Parts: Plated To Meet The Environmental Requirements

MATING CHARACTERISTICS

Bodies:	24 oz. (1.5 lbs.) Max. Insertion 2 oz. (0.125 lbs.) Min. Withdrawal
Contacts:	14 oz. (0.875 lbs.) Max. Insertion .5 oz. (0.031 lbs.) Min. Withdrawal
Axial Mating:	.070"
Housing Retention:	192 oz. (12 lbs.) Min.

ELECTRICAL

Frequency Range:	DC To 42 GHz
Voltage Rating Straight:	800 VRMS
Voltage Rating Angled:	600 VRMS
Insulation Resistance:	2000 Megohms Min.
Insertion Loss:	$.06\sqrt{f(GHz)}$ dB
Impedance:	50 Ohms
Contact Resistance:	Center Contact 6 Milliohms
Contact Resistance:	Outer Contact 4 Milliohms
VSWR:	Configuration Dependent
RF Leakage:	-90 dB Min. @ 2-3 GHz

ENVIRONMENTAL

Operating Temperature:	-65°C To +165°C
Insulation Resistance:	2000 Megohms Post Humidity
Vibration:	MIL-STD-202, Method 204, Test Condition D
Shock:	MIL-STD-202, Method 213, Test Condition I
Thermal Shock:	MIL-STD-202, Method 107, Test Condition B, Except High Temperature Shall Be +85°C
Durability:	500 Cycles
Moisture Resistance:	MIL-STD-202, Method 106
Salt Spray:	MIL-STD-1344, Method 1001, Condition B

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